

shown and described herein. Modifications and substitutions by one of ordinary skill in the art are considered to be within the scope of the present invention.

What is claimed is:

1. A method for transferring electric energy between an electric vehicle to an infrastructure comprising:

coupling the electric vehicle to an electrical transfer interface;

specifying an amount of electricity for transferring between a battery and the infrastructure;

transferring electricity between the battery in the electric vehicle and the infrastructure during peak electric hours wherein the infrastructure uses the electricity from the battery as electric power;

monitoring the transfer of electricity between the battery wherein total transfer of all of the electricity from the battery is prevented;

transferring electricity between the infrastructure and the battery of the electric vehicle during off peak hours;

adjusting a charge of the battery of the electric vehicle; and

reducing a parking fee by the amount of electricity that is transferred from the electric vehicle.

2. The method of claim 1, further comprising the electric vehicle and the infrastructure communicating using a network.

3. The method of claim 1, further comprising the electric vehicle authorizing the transfer of electricity from the battery to the infrastructure.

4. The method of claim 1, wherein transferring electricity from the infrastructure to the battery of the electric vehicle during off peak hours further comprising programming the network to transfer the electricity from the infrastructure to the battery of the electric vehicle at a preprogrammed time.

5. The method of claim 1, further comprising determining the amount of electricity available in the battery.

6. The method of claim 1, further comprising decoupling the electric vehicle from the electrical transfer interface.

7. A method for transferring electric energy from an electric vehicle to an infrastructure comprising:

specifying amount of electricity that may be transferred from a battery to the infrastructure;

transferring electricity from a battery in the electric vehicle to the infrastructure during peak electric hours wherein the infrastructure uses the electricity from the battery as electric power;

monitoring the transfer of electricity from the battery wherein total transfer of all of the electricity from the battery is prevented;

transferring electricity from the infrastructure to the battery of the electric vehicle during off peak hours;

recharging the battery of the electric vehicle; and

reducing a parking fee by the amount of electricity that is transferred from the electric vehicle.

8. The method of claim 7, further comprising the electric vehicle and the infrastructure communicating using a network.

8. The method of claim 7, further comprising the electric vehicle authorizing the transfer of electricity from the battery to the infrastructure.

9. The method of claim 7, wherein transferring electricity from the infrastructure to the battery of the electric vehicle during off peak hours further comprising programming the

network to transfer the electricity from the infrastructure to the battery of the electric vehicle at a preprogrammed time.

10. The method of claim 7, further comprising determining the amount of electricity available in the battery.

11. The method of claim 7, further comprising coupling the electric vehicle to an electrical transfer interface.

12. The method of claim 11, further comprising decoupling the electric vehicle from the electrical transfer interface.

13. A system for communicating electric energy, the system comprising:

an electric vehicle; and

an electrical transfer interface configured to couple to the electric vehicle and to an infrastructure;

wherein the electrical transfer interface is configured to: receive an amount of electricity to transfer between a battery and the infrastructure;

transfer electricity between the battery in the electric vehicle and the infrastructure during peak electric hours wherein the infrastructure uses the electricity from the battery as electric power;

monitor the transfer of electricity between the battery wherein total transfer of all of the electricity from the battery is prevented;

transfer electricity between the infrastructure and the battery of the electric vehicle during off peak hours;

adjust a charge of the battery of the electric vehicle; and

adjust a parking fee corresponding to the amount of electricity that is transferred through the electric vehicle.

14. A system for transferring electric energy, the system comprising:

an electric vehicle; and

an electrical transfer interface configured to couple to the electric vehicle, the electrical transfer interface is configured to transfer electricity from the battery in the electric vehicle to the infrastructure during peak electric hours wherein the infrastructure uses the electricity from the battery as electric power, the electrical transfer interface is configured for a user to specify an amount of electricity to transfer from a battery to the infrastructure, the electrical transfer interface is configured to transfer electricity from the infrastructure to the battery of the electric vehicle during off peak hours

wherein:

total transfer of all of the electricity from the battery is prevented;

the battery of the electric vehicle is recharged; and

a parking fee is adjusted by the amount of electricity that is transferred from the electric vehicle.

15. A system for communicating electric energy, the system comprising:

an electric vehicle; and

an electrical transfer means to couple to the electric vehicle and to an infrastructure,

wherein the electrical transfer means is configured to:

receive an amount of electricity to transfer between a battery and the infrastructure;

transfer electricity between the battery in the electric vehicle and the infrastructure during peak electric hours wherein the infrastructure uses the electricity from the battery as electric power;